

ABSTRACT OF THE DISCLOSURE

A spring-based crankshaft coupling structure used in an engine and coupled between a piston and a crankshaft to enhance the output torque of the engine is disclosed to include a first coupling member pivoted to the piston, the first coupling member having a downwardly extended receiving open chamber defined in a downwardly extended hollow body thereof and an inner tube suspended in the downwardly extended receiving open chamber, a second coupling member pivoted to the crankshaft, the second coupling member having an upwardly extended hollow body axially movably sleeved onto the inner tube in the hollow body of the first coupling member, and an axially compressible spring member mounted in the inner tube inside the first coupling member and coupled between the first coupling member and the second coupling member.